amended: October 16, 2003

Safety Review Committee
September 19, 2003
10:00 AM – 12:00 PM

Minutes

Members Present
Michael Banda, Dennis Collins, Sharon Doyle, Ben Feinberg (Chair), Richard Kadel, Ed Lampo (Secretary), Don Lucas, Othon Monteiro, Linda Smith, Scott Taylor, Weyland Wong, Linda Wuy, Hisao Yokota

Members Absent
Joel Ager, Ken Fletcher, Mack Kennedy, Peter Lichty, Steve Lundgren, Augusto Macchiavelli, Linfeng Rao

Others Present
Sally Benson, John Chernowski, Ted de Castro, Jeffrey Chung, Heinz Frei, Anil More, Jeff Pelton, Jennifer Rosado, Robin Wendt, Otis Wong, Gary Zeman

Previous Minutes

Minutes of the August 15 meeting were distributed and discussed.
The minutes were accepted as submitted.

Comments from the Chair

MESH Frequency: Be prepared next month to discuss when the next ALS, Directorate, EETD and PBD reviews should be done**.**

Physics MESH: Paper work is promised from Physics. MESH visits planned for October.

Ergo Pilot evaluations to be requested of participating Divisions by ye ar-end.

2004 MESHs: AFRD, Earth Sciences, Engineering, Facilities, and NSD.

Campus MOU

Robin Wendt stated that he has discussed the MOU with several LBNL Directors that have campus involvements. The MOU package soon will undergo review by UC management. Robin asked the SRC if there are others at LBNL that might/should be involved/aware of the MOU?

Physical Biosciences Division: MESH Response

PBD MESH Team member, Ed Lampo thanked PBD for their cooperation and commented that the MESH team found a robust well-established safety program in place at PBD. Ed introduced Heinz Frei, PBD Deputy Director. Follows is summary of Heinz's presentation.

Overview of PBD

Heinz outlined the mission, programs, and locations of the diverse Physical Biosciences Division. PBD has programs in Chemical Biology, Biological Dynamics, Structural Biology, Advanced Microscopies, and Theoretical Biology. They have 200 employees in LBNL space and 135 on campus -- over half are students.

Safety at PBD

The PBD Director actively oversees safety at PBD. He commits resources to correct safety issues, does walk through of PBD space at least once a year, reviews the Integrated Safety

Management (ISM) Plan on a yearly basis, meets with his Safety Planning Team and Division Safety Coordinator, and reviews tri-annual reports prepared by Safety Coordinator.
PBD ensures that Principal Investigators (PIs) are aware of their Safety responsibilities by:

- Providing them with a copy of the ISM Plan.
- Discussing the hazards in their research every year with the Safety Coordinator.
- Having them appoint a representative to the Safety Committee.
- Discussing safety issues at group meetings.
- Involving them in Self-Assessment (SA) by being in charge of the forms that are distributed to his/her group.

The PBD Safety Planning Team is comprised of:

Safety Coordinator (0.2 FTE) - Jeffrey Pelton
Yearly Visits to PIs
Meetings with Division Director
Tri-annual reports on safety
PBD Safety Administrator (0.2 FTE) - Marie Alberti
JHQ Training
LCATs
AHDs
HEAR
Chemical inventory
PBD Facilities Manager (0.3 FTE) - Vangie Peterson
Emergency Team
Building Safety
SAAs
EH&S Division Liaison: Jack Salazar

The PBD Safety Committee is responsible for:

•Reviews the Safety Charter
•Meets ten times/year
•Is comprised of all of the Division PIs or their designated representatives
•Reports back to their groups and makes them aware of safety issues
•Brings safety issues from their groups to the committee

Noteworthy Practices from MESH

- Safety checklist for all students and staff
- Appointed UC Berkeley EH&S liaison - Phil Maynard
- Stations for chemical handling guidance and to obtain labels
- Proactive ergonomics program. Ergonomics discussed at Division safety meetings. Survey to identify high-risk workstations.
- Staff and students are well trained.
- As part of self-assessment, all of staff inspect their spaces.
- Division Director holds all accountable for safety.

MESH Concerns & Observations and PBD Response/Correction

•Concern: Laser Safety; Training (major user had not taken re-training) & Configuration
Response: Training has been completed and configuration being investigated.
•Observation: Rapid expansion may hamper safety communication.
Response: All of staff receive email distribution of safety news.
•Observation: Notification of IBC authorizations did not reach safety coordinator.
Response: Biosafety officer, and Deputy Director now notify
Safety Coordinator of new IBC and BUA authorizations.

Safety Goals

- Continue to emphasize good ergonomic practices at PBD
- Target laptops and multiuse workstations
- Continue safety education at PBD ES&H meetings
- Continue to promote safety as part of daily work activities

Directorate/Operations/ASD: MESH Response

The Directorate/Operations Organization is comprised of a diverse collection of business units:

- Human Resources
- Financial Services
- Technology Transfer Department
- Public Affairs Units
- Directorate's Organizational Units (Directorate Office, Lab Counsel, Workforce Diversity, Internal Audit, Planning & Strategic Development, and Project Management)
- Operations Office
- Administrative Services Department

The organization has a staff of ~ 600 employees (of these, 330 are in ASD and mostly are matrixed to other divisions). The staff performs management and administrative work in an office environment -- it is computer intensive. Also supported are student science activities through CSEE.

MESH Report – Issues Identified

- Strengthen the systematic approach in managing safety program.
- Expand safety communication system across all Dir/OPS/ASD units.
- Establish clear roles and responsibilities for Dir/OPS/ASD safety committee members.
- Implement a formal system for tracking safety deficiencies and corrective actions.
- Develop formal safety agreement (MOU) between ASD matrixed staff and host divisions.
- Improve injury and illness rate, emphasizing ergonomic injury prevention.

Concern: Communication: is inconsistent and may not reach all staff.
Response:

- Revise Safety Committee charter to:
- Establish safety committee meeting frequency
- Define committee members' roles and responsibilities
- Record meeting minutes and distribute to all.

Distribute list of safety committee members to line managers and employees.

Concern: Communication: Current Dir/OPS management and safety coordinator were unaware of 2002 MESH review results.
Response:

- Current Dir/OPS management team was assembled post MESH 2000.
- Acknowledge need for improved communication.
- Will prepare and disseminate MESH results summary to line management and track corrective actions through LCATS.

Concern: Ergonomics was identified by Dir/Ops as a primary hazard in ISM but training &/or tracking is not working.
Response:

- Upgrades being made to link JHQ with new EH&S ergo evaluation request system.

- On-line system to automatically credit EH&S 61 .
- Add metric to internal "at-a-glance" chart to track ergo evaluation progress.

Concern: Dir/Ops does not have a systematic process for tracking safety deficiencies.
Response:

- Systematically use LCATS for tracking safety deficiencies and corrective action status.
- Train unit safety representatives on LCATS.
- Monitor corrective action status with internal "at-a-glance" chart.

Observation: There is no formal MOU for ASD staff matrixed to other divisions.
Response:

- Develop formal MOU template (align with pending Lab safety policy for staff matrixed between divisions) to address matrixed staff between home and host organizations.
- Revise ISM plans to address matrixed staff.

Observation: ISM plan stipulates that staff receive ergo evaluations every three years, however there is no formal system in place to notify division safety coordinator or EH&S Division Liaison.
Response:

- Prepare management guidance in ISM Plan for tracking, requesting and assuring triennial ergo evaluation cycle is followed.
- Rely on new EH&S on-line ergo evaluation system.

Observation: Accident/Injury rate increased significantly over the last year.
Response:

- Disseminated lessons learned article in ASD on-line newsletter about fall prevention.
- Proactively include ergonomic design and functional review to office moves, institutional database system development and office-related renovation/construction.
- Raise ergonomic awareness through special forums and refresher training (on-line).

Observation: The ASD Executive Safety Committee has not met in the last year.
Response:

- Review and update committee charter as needed.
- Revitalize committee and meet on a standing schedule each year.

Strategic Safety Path Forward

- Do more than just address MESH Report's findings.
- Implement improvement in safety performance across organizational units.
- Re-assess current safety management system (SWOT Analysis).
- Reinvent traditional safety coordinator position; focus on business system integration (policies/procedure/operational risk management/ISM).
- Create a Dir/OPS/ASD culture that makes safety a quality of work life.
- Establish an Integrated Safety Management Committee to drive SWOT Analysis (facilitated by EH&S Liaison).
- Conduct "Needs Assessment Survey" for safety reps that leads to an effective development program and training curriculum.

- Perform SWOT Analysis of ISM program (e.g., ISM plan, staff's and managers' safety roles/responsibilities/expectations, committee structure, record keeping systems and safety coordinator function, etc.).
- Develop tailored supervisor (EH&S 20) and Job Safety Analysis training courses for line managers and supervisors.
- Provide refresher ergonomic awareness training to staff.
- Increase number of trained "in-house ergonomic evaluators" for accident prevention purposes.
- Track actions and progress toward addressing MESH report.

It was noted by Robin Wendt that training of Ergo Evaluators is underway. The plan is to have one person so trained per group and this person would do first/low level evaluation -- referring more serious findings on to EH&S.

Laser Safety Program Review Panel

The panel was convened to provide a comprehensive review of the LBNL Laser Safety program for all on-site operations as well as the UCB laser safety program to the extent that it affects LBNL laser operations on the University of California Berkeley campus. There are two objectives for this review: (1) to determine whether a consistent and effective approach to work planning, hazards analysis and controls exists for DOE sponsored work at LBNL and the UCB campus; and (2) to provide recommendations for program improvements so that laser accidents are prevented and the safe conduct of scientific research that uses lasers is optimized.

Findings:

Line Management Responsibility for EH&S:

- Line Management Responsibility is clear for work performed in LBNL spaces.
- LBNL does not exercise line management of work performed in Appendix I spaces.
- Laser safety line management responsibility is designated in the UCB "Laser Safety Manual" to the PI. However implementation may vary at the level of each research group.
- Campus PIs and users interviewed were not aware of policies or their responsibilities as outlined in the campus documents.

Clear Roles and Responsibilities:

- LBNL's ISM systems do not apply in Appendix I space, because the MOU predates ISM by 5 years.
- There is uncertainty at the LBNL Division Management Level as to the responsibility for operations in Appendix I space.
- Some UCB PIs express concern that operations in Appendix I space might be subject to both LBNL and UCB rules or safety systems.

Competence Commensurate with Responsibilities:

- LBNL: Generally good
- Campus: Generally good, but more variable

Balanced Priorities:

- LBNL: Some personal protective equipment (PPE) and engineering controls are not systematically implemented across the lab.
- Campus: EH&S resources appear to be challenged

- Engineering controls are not systematically implemented across the campus.

Identification of EH&S Standards and Requirements:

- Both in general are in compliance with ANSI Z136.1

Hazard Controls Tailored to Work Being Performed

- LBNL has a policy of total beam enclosure or eyewear for Class IIIb and IV lasers. Campus is considering this policy.
- Some other controls not consistently applied at both sites

Operations Authorization:

- LBNL: Clear through the AHD process
- Campus: Clear for startup, but not for modified systems

Corrective Action Plan

•Chuck Shank tour of lab
–"total beam enclosure or eyewear"
•ISM for LBNL work at UCB
–Line management accountability
–MOU on EH&S oversight
•Panel investigation
–13 recommendations for LBNL, 22 for UCB
–Some already implemented, some will take time, some require SRC attention

SRC Attention Needed

1.Affirm "total beam enclosure or eyewear"
2.Require next round of laser AHD renewals to go thru EH&S (to ensure implementation of most panel recommendations)
3.Eyewear outside lab – options for implementation
4.Crash buttons for electrical safety – not a laser safety issue, exclude this ANSI Z136 requirement from WSS
5.NHZ calculation – affirm current implementation scheme, exclude this ANSI Z136 requirement from WSS
6.Return in 3 months with closure report on CAs

The meeting was adjourned at 11:50 AM.

Respectfully submitted,

Edward J. Lampo
SRC Secretary